ENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| h | Breadth 5 | Depth 6 | 7 | 8 |
| | | | | |

SBR NO-37/15-16
Dt: 30-4-15

M. A. R. 57 (Rule 116)
Measurement Book

No. B 249533

Serial No. 1st and fin-Bill

Name of Work Loop to Road of drain in Banavathi Road in Wd no-09 From To

Name of Contractor of nature of Agency B. Girish Vidyaranyapura Sub-Divn

Date of commencement of work D.O.R. 25/04/2015

| Date 1 | Full description, etc, of work 2 | Dimensions Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | Estimated cost Rs | 15.00 Lakhs | | | | | |
| | JOB.No | : 009 - 15-000025 | | | | | |
| | Work order no | : EE/BTP/BBMP/T-PMT/08(16520)/WO/296/ 2014-15 Dt. 06-02-2015 | | | | | |
| | Date of commencement | : 07-02-2015 | | | | | |
| | Date of Completion | : 20-04-2015 | | | | | |
| 1 | Earthwork Excavation by manual mean in ordry | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| | dsil involving an average horizontal throw upto 2m at an average lift upto 0.500m, Excavated surface levelled and sides neatly dressed, the disposed Earth to be levelled neatly after breakage of clods complete as per specification etc complete as per specifications and directions of Engineer-in-charge of the Work | | | | | | |
| | Qty as de | | | | 2492 | 249152 | |
| | It as ① : | | | | | 524.934 m³ @ 79.00/m³ | 41469.00 |
| 2) | Scarifying existing stone metal layer upto 75mm thick along with their bituminous surface, pickup consisted by cracks and stacking of old serviceable | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | |
|---|---|---|
| 1 | 2 | |
| | materials with lead of salvaged aggregate base and consolidating specifications including etc complete as per specify Charge of the Work. | |

## MENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| ngth 4 | Breadth 5 | Depth 6 | 7 | 8 |
| ...rtd thrwd upto 2m of ...cvated surface levelled ...sed Earth to be levelled complete as per specifications ...d directions of Engrs - | | | | |
| de ~~Rate~~ m/s 2492 | | | 249152 | |
| ...r no. (1) : | 524. | 93 4/3 @ 79.00/4³ | | 41469.00 |
| ...ted layer upto 75mm ...imous surface, pick up ...ly of old serviceable | | | | |

**M. A. R. 57 (Rule 116)**
Measurement Book

**No. B** 249534

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions: Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | materials with lead of 1KM, sequential Spreading of the salvaged aggregate Dis from aggregate on prepared base and consolidating as per Water bound macadam Specifications including costing all taxes, Hamali, Machines etc complete as per specifications and directions of Engineers in Charge of the Work. | | | | | | |
| | Ordinary rock ~~Rate~~ m/s 2492 | | | | | 249153 | 122304.00 |
| | Item no. (2) : | 1 | 545 | 4² @ | 87.00/4² | 134415.00 | |
| | | | 105.79 | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 3) | Providing, laying, spreading, and compacting graded stone aggregate to wet mix macadam specifications including premixing the material with water at one in mechanical mixplant, Conveyance of mixed material by tipper to site, laying in uniform layers with vibratory Roller to achieve the desired density etc complete as per specifications and directions of Engineer in-charge of the Work. | | | | | | |
| | | | | | | Qty vide MB No. 2492 Pg 249158 (3). 254.934 @ 1510/- 3,84,944.00 | |
| 4) | Cleaning the existing WBM Road surface including removing binding materials and other foreign | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work |
|---|---|
| 1 | 2 |
| | matter with wire brush with brooms or dry old gunny bags and bituminous treatment (boom, Rom of ma specification and di Work. |

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| ngth 4 | Breadth 5 | Depth 6 | 7 | 8 |
| mpacting graded stone aggregate<br>hes including premixing the material<br>l mixplant, Carriage of mixed material<br>layers with vibratory Roller to<br>mpletean per specifications and<br>f the Work. | | | | |
| nole. As m13 2492 P 249158 | | | | |
| no. (3). 254.934 @ 1510/- | | | | 3,84,944.- |
| ood surface including<br>and other foreign | | | | |

**M. A. R. 57 (Rule 116)**
Measurement Book **No. B**

Serial No. .....
Name of Work ..... From..... To..... 249535
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions | | | | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | | Number 3 | Length 4 | Breadth 5 | Depth 6 | | |
| | matter with wire bushes and small picks, sweeping with brooms or coir brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including costing all materials labour, Hire of machinery, curing etc complete as per specification and directions of Engineer-In-charge of the Work. | | | | | | |
| | Ok mall m3 2492 P 249159 | | | | | | |
| | H no. (4) = 233 | | | | | @ 113/- | 30388.- |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 5) | Providing and applying primer coat for surface of medium porosity like cement stabilized soil base @ 1.10 kg/sqm over prepared surface with S.S bitumen emulsion using bitumen tanker fitted with spray set (Excluding cleaning of mud surface) including cost of all material, labour, hire of machinery etc complete as per specifications and direction of Engineer-in-charge of the work. | | | | | | |
| | | Qty as per Sr no ④. | | | | | |
| | | = 2335 m² @ 77/m² | | | | | 179795.- |
| 6) | Providing and laying semi dense bituminous concrete | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .
Date of commencement of work .....

| Date | Full description, etc, of work |
|---|---|
| 1 | 2 |
| | crushed aggregate with bituminous bin mix to work site, l required grade leve wheeled, vibratory desired compactio clause no 508, C specifications. Usi dense paver m |

ENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| gth 4 | Breadth 5 | Depth 6 | 7 | 8 |
| | | | ...ad for surface of medium dense base @ 1.10 kg/sqm ...s bitumen emulsion ...with spray set (Excludg ...cluding Cost of all ...chinery etc complete ...ction of Engineer-in-chg | |
| | | | ...g as per Item no (4). = 2338 sq.m @ 77/sq.m | 179795.- |
| | | | bituminous concrete. | |

**M. A. R. 57 (Rule 116)**
Measurement Book

**No. B**

249536

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions | | | | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | | Number 3 | Length 4 | Breadth 5 | Depth 6 | | |
| | Crushed aggregates of specified grading, premixed with bituminous binder and fillers, transporting the mix to work site, laying with a paver finisher to the required grade level and alignment, rolling with smooth wheeled, vibrating and tandem rollers to achieve the desired compaction as per MORTH specifications, Clause no 505, Complete in all respects as per specifications. Using 100-120 TPH, Capacity Hmp with dense paver grading II (25-30 mm) with SF CRMB | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | grade etc complete as per specifications and directions Engineer-In-charge of the work. | | | | Avg | | |
| | a) CROSS-Road-1 | 1 | 30.00 | 4.30 | 0.025 | = 3.237 | |
| | | 1 | 6.65 | $\frac{4.3+4.9}{2}$ | 0.025 | 0.76 0.76 | |
| | | 1 | 4.20 | $\frac{5.7+4.6}{2}$ | 0.025 | 0.34 | |
| | b) CROSS-Road-2 | 1 | 30.00 | $\frac{5.0+4.9}{2}$ | 0.025 | 3.71 | |
| | | 1 | 30.00 | $\frac{4.9+5.1}{2}$ | 0.025 | 0.63 | |
| | c) - main Road | 1 | 30.00 | $\frac{7.0+6.1}{2}$ | 0.025 | 4.91 | |
| | | 1 | 30.00 | $\frac{6.1+5.9}{2}$ | 0.025 | 4.50 | |
| | | 1 | 30.00 | $\frac{5.9+5.9}{2}$ | 0.025 | 4.43 | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agen
Date of commencement of work .....

| Date | Full description, etc, of work |
|---|---|
| 1 | 2 |
| | d) CROSS-Road-3 |
| | e) Dippression bilw main-Road |

BOOK

| ns | | Contents | Reference to last Measurement |
|---|---|---|---|
| eadth 5 | Depth 6 | 7 | 8 |
| ons | and directory | | |
| | Avg | | |
| 30 | 0.025 | = 3.23 | |
| 3+4.9 / 2 | 0.025 | 0.76 0.76 | |
| +4.6 / 2 | 0.025 | 0.34 | |
| +4.9 / 2 | 0.025 | 3.71 | |
| +5.1 / 2 | 0.025 | 0.63 | |
| +6.1 / 2 | 0.025 | 4.91 | |
| +5.9 / 2 | 0.025 | 4.30 | |
| +5.9 / 2 | 0.025 | 4.43 | |

M. A. R. 57 (Rule 116)
Measurement Book

No. B

249537

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1 | 30.00 | 5.9+5.80 / 2 | 0.025 | 4.41 | |
| | | 1 | 30.00 | 5.85+4.7 / 2 | 0.025 | 3.96 | |
| | | 1 | 31.00 | 4.7+6.5 / 2 | 0.025 | 4.34 | |
| | (d) CROSS-ROAD -> | 1 | 30.00 | 3.9+4.2 / 2 | 0.025 | 3.04 | |
| | | 1 | 30.00 | 4.2+4.8 / 2 | 0.025 | 3.38 | |
| | | 1 | 3.50 | 4.8+4.0 / 2 | 0.025 | 0.39 | |
| | (e) Dippression bring main-Road | 1 | 14.90 | 3.05 | 0.025 | 1.13 | |
| | | 1 | 16.75 | 2.95 | 0.025 | 1.23 | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1 | 19.20 | 3.30 | 0.025 | 1.58 | |
| | | 1 | 18.90 | 3.40 | 0.025 | 1.60 | |
| | (d) Thandlu Veerabhadra swamy temple-Road from 54.00 to 60.00 | 1 | 6.00 | $\frac{7.7+7.4}{2}$ | 0.025 | 1.17 | |
| | 60.00 to 91.50 | 1 | 31.50 | $\frac{7.4+8.8}{2}$ | 0.025 | 6.38 | |
| | (g) for patchworks at Dwarka chowky Road | 1 | 11.70 | $\frac{3.6+3.5}{2}$ | 0.025 | 1.04 | |
| | | 1 | 27.00 | $\frac{5.35+5.5}{2}$ | 0.025 | 3.51 | |
| | | 1 | 30.00 | 4.90 | 0.025 | 3.67 | |
| | | 1 | 6.00 | 4.90 | 0.025 | 0.73 | |
| | | | | | | 64.29 | |
| | | | | 44 | No. | 64.29 | 746249.00 |
| | | | | | | 11622.73 | |

CRC & Verified by me 15/5/15 22/Bhp.

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | N |
|---|---|---|
| 1 | 2 | |
| 7) | Lead for Disposal of debris rates by mechanical charges. | mec |

Certificate

① Certified that the work is satisfactorily.

② The contractor has re

BOOK

| ons | | Contents | Reference to last Measurement |
|---|---|---|---|
| eadth 5 | Depth 6 | 7 | 8 |
| 30 | 0.025 × | 1.58 | |
| ·40 | 0.025 × 2 | 1.60 | |
| +7.4 / 2 | 0.025 | 1.12 | |
| +8.8 / 2 | 0.025 | 6.38 | |
| +3.5 / 2 | 0.025 | 1.04 | |
| 5+5.3 / 2 | 0.025 | 3.51 | |
| 90 | 0.025 | 3.67 | |
| 90 | 0.025 | 0.73 | |
| | | 64.29 m³ | |
| d | No. | 64.21 m³ | 746249.00 |
| | | C 11622/m³ | |

M. A. R. 57 (Rule 116)
Measurement Book

No. B

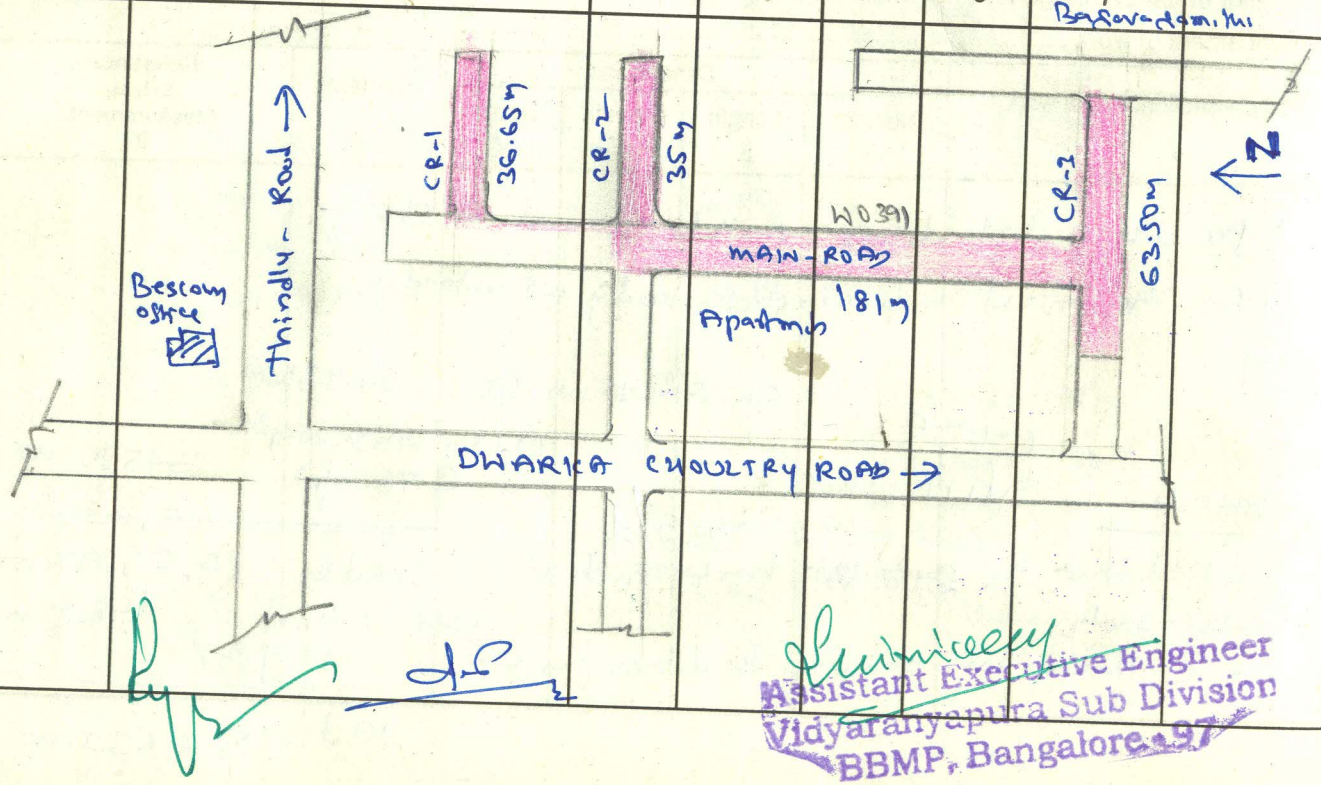
249538

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions: Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| 7) | Lead for Disposal of debris shall be payable at Contract rates by mechanical means including loading and unloading charges. | | | | | | |
| | | Qty vide MB No. ①, Ld No | | | | 524.934 m³ 455.00 m³ @ 76.00/m³ | 34580.00 |
| | | | | | | | 1539696.00 |
| | Certificate | | | | | | |
| | ① Certified that the contractor has work done satisfactorily. | | | | | Total Rs | 15,51,807.00 |
| | ② The contractor has removed the debris from site | | | | | Add 1% third party insp | 14826.00 |
| | | | | | | Total | 15,66,633.00 |
| | | | | | | | 1539696.00 |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | | | | Bagavadam.Mu | |




Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

BR-56
15/5/15

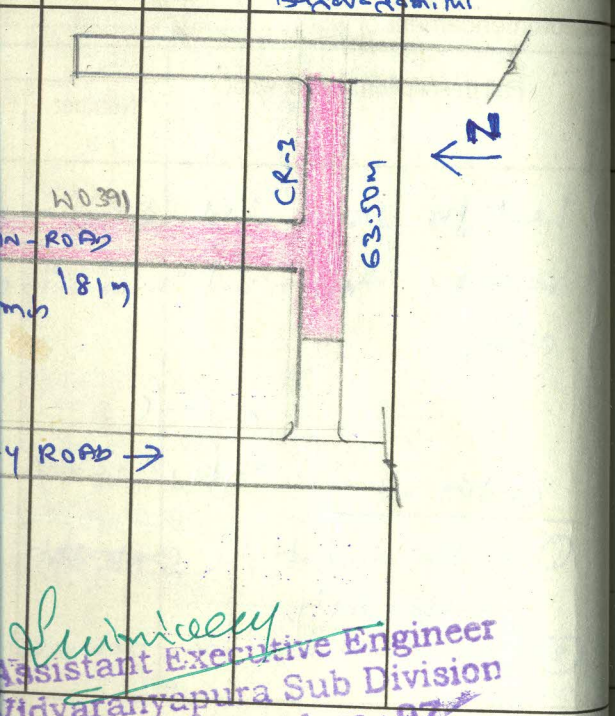
Serial No. .....
Name of Work ..... Fr
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | Numb |
|---|---|---|
| 1 | 2 | 3 |

Audited & Admitted to Rs
1328357-0
and Rs 21303

ENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| h | Breadth 5 | Depth 6 | 7 | 8 |
| | | | Bayavadamitti | |




Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

BR-56
15/5/15

M. A. R. (116)
Measu... ...ok

No. B

249539

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Audited & Admitted to Rs 1539690-00 | | | | | IT - 15397-00<br>VAT - 61588-00<br>LDF - 15397-00<br>CBF - 1540-00<br>LR - 25000-00<br>FSD - 92351-00<br>Refund - 211303-00 | |
| | 1328387-00 by cheque<br>and Rs 211303 by adjustment | | | | | | |
| | Krishnaprasad & Co<br>Asst. Engineer<br>Bya[illegible] & Co<br>BBMP. | | | | | | |